

DRAFT

A meeting of the New Hampshire Water Well Board was held on September 11, 2008 at 9:00 AM, in rooms 112 & 113, 29 Hazen Drive, Concord NH, 03302.

Present were: Bart Cushing, Chairman

Rene Pelletier, Secretary (arrived 10:10 am.)

Board Members: Jeffrey Tasker, Peter Caswell, Christopher Covell, and Thomas Garside
NHDES Staff: Richard Schofield and Allyson Gourley

Chairman Cushing brought the meeting to order at 9:17 AM.

Approval of Minutes

6/5/08 Meeting: Mr. Schofield informed the Board that he had received an e-mail from Mr. Sabin Guertin regarding the draft Minutes. Mr. Guertin did not agree with a statement on page 4, paragraph 7, which reads: "*Mr. Guertin told the Board that he is not contesting the \$800. charge for the pump*". Mr. Guertin felt the statement did not clearly express the basis of his complaint which was the final bill amount of \$1,206.

Mr. Schofield told the Board that after receiving Mr. Guertin's e-mail he listened to the recording of the meeting and determined that the statement had been quoted correctly, however recognizing that the statement was made out of context with the nature of the complaint, he recommended to the Board that the statement be stricken from the record.

The Board agreed to amend the Minutes as recommended by Mr. Schofield. Upon motion by Mr. Covell and seconded by Mr. Tasker, the Board unanimously voted to accept the Minutes of the meeting.

Old Business**Rules**

Mr. Schofield presented an update on the rule adoption process for the Board. He said the day following our last meeting, the proposed rules went to JLCAR and were approved. The rules were adopted on June 12 and became effective on June 13. The rules will expire on June 13, 2016 (8 years).

Mr. Schofield told the Board that he received a copy of the approved rules from the Office of Legislative Services. He corrected some typographical errors and sent them back to Legislative Services for correction. Once the rules are returned to him, they will be "camera ready" and we can have copies published by Graphic Services. Mr. Schofield said that the last time he ordered rules, he ordered 500 copies which covers the approximate number of licensed businesses in the state. The cost at that time, which was eight years ago, was \$1,075. He recommended ordering 500 copies again. Mr. Schofield informed the Board that he spoke with the Chairman and they agreed the front cover of

the new rules will be green, so they will be easy to distinguish from the old rules which had a blue cover. He also commented that the new rules are available on-line.

There was considerable discussion amongst the Board members regarding how many copies of the new rules should be ordered. Mr. Covell thought that we should purchase more than 500 copies since that would only cover the licensed businesses with none left over.

Mr. Schofield mentioned that we would receive a better price for a larger order. He suggested to the Board that he get price quotes from Graphic Services for 500 and 750 copies and the Board could vote on this matter at the next meeting.

ANSI / WSC PST 2000 Pressurized Water Storage Tanks

Mr. Schofield handed out information packets about Flexcon Industries to the Board members that had missed the presentation by Wind Evans at the last meeting. Mr. Schofield told the Board that Wind Evans on behalf of Flexcon Industries is requesting that NH adopt the ANSI / WSC PST 2000 – 2005 Standard for pressurized water storage tanks. The reasons stated by Mr. Evans at the June 5th meeting were:

- Create & document safety standards
- Increase credibility of water well systems
- Increase consumer and contractor safety
- Third party testing requirement

Additionally, all materials of a tank must comply with NSF 61 & ASTM standards. All tanks must be 100% pressure tested.

The Board had requested a list of manufacturers that currently meet the standards. Mr. Schofield directed the Board's attention to the list, provided by Wind Evans, which was included in their meeting packets.

Chairman Cushing lead the discussion by saying that he agrees adopting the standard is a good idea, but noted that many tank manufacturers will be shut-out.

Mr. Covell used the example of a homeowner with a tank from a non- approved manufacturer would not know if their tank was off-gasing VOC's unless they had their water tested.

All of the Board members agreed that the most important issue is protecting public health.

Chairman Cushing suggested giving the industry a certain amount of time to adopt the standard, such as 24-36 months.

Mr. Schofield reminded the Board that if they voted to adopt the standard, the matter would still need to go through the rule-making process.

Chairman Cushing recommended that the Board adopt the standard within a 24-month time period.

Mr. Caswell recommended an 18-month time period and made a motion. The motion was seconded by Mr. Covell. The Board voted unanimously to adopt the standard with an effective date 18 months following adoption.

Complaints

Sabin Guertin / Village Pump and Irrigation

Chairman Cushing directed the Board's attention to a letter dated September 8, 2008, from DES to Mr. Holland (Village Pump & Irrigation) regarding an inspection by DES of the pump installation at the property of Mr. Guertin.

Mr. Schofield reiterated the specifics of the complaint by Mr. Guertin against Village Pump & Irrigation. He stated that the main issues of contention for Mr. Guertin were that he never received an itemized bill for the work, and that he did not receive a warranty card for the pump. Mr. Guertin feels he was grossly overcharged and that Mr. Holland's actions were unprofessional (citing We 501.02).

Mr. Schofield directed the Board's attention to the photographs taken at Mr. Guertin's property. He stated that the only violation noted was that the existing electrical wire ("Romex") was dangling from the rafters; not supported, or in conduit as required by the National Electrical Code and also adopted by the Water Well Rules. He went on to say that DES believes that the contractor is required to correct this deficiency. The pump installer can reasonably expect to be compensated for this work.

Chairman Cushing invited Mr. Guertin to the table. Mr. Guertin stated his name and address. He informed the Board that his sister, who was the person who had authorized the work on his well pump (in his absence) was also present. He told the Board that the problem with the electrical connection of the pump was not an issue that he had been aware of and was not part of his complaint.

Mr. Guertin quoted a statement in the September 8, 2008 letter sent to Mr. Holland that said: "*standard industry rate*", and asked the Board what they would consider that rate to be. Mr. Guertin also said that he feels as a consumer that he has a right to know that the work is in compliance with the rules. Mr. Guertin asked the Board if they had any questions of him. Mr. Covell asked Mr. Guertin if he had received a receipt. Mr. Guertin replied yes, and said that he had also received a copy of Mr. Holland's letter. Mr. Covell asked if he had received a warranty card. Mr. Guertin replied no, not that he was aware of, but indicated that it could have accidentally been thrown out with the trash.

Mr. Caswell commented that the pump suppliers that he uses usually warranty their products for 1 – 5 years from the date of installation.

Mr. Guertin indicated that he was satisfied with regard to the warranty issue, but again asked the Board to respond to his question about the “*standard industry rate*”.

Chairman Cushing explained that labor charges are not regulated by the Board, but the Board can render an opinion as to a “fair rate”. He asked Mr. Guertin “*How is the system operating?*” Mr. Guertin replied “*fine*” and returned to his seat.

Chairman Cushing invited Mr. Holland of Village Pump & Irrigation to the table.

Mr. Holland stated his name and address for the record. Then he summarized the sequence of events from receiving the initial call from Mr. Guertin to locating an available pump at Water Industries and quoting Mr. Guertin’s sister a price to replace the pump. He said he told Mr. Guertin’s sister that the cost, including labor and fittings, would be over \$800.

Mr. Holland told the Board that he had not yet received the September 8, 2008 letter in the mail, but Mr. Schofield provided him with a copy this morning.

Mr. Caswell noted there seem to be different standards for submersible and jet pumps. He said if he had done the pump installation, he would have informed the homeowner that he needed to have the wiring brought up to code by a Master Electrician.

Chairman Cushing asked Mr. Holland, knowing that he was formerly a licensed electrician; “*did he consider this a proper installation?*”

Mr. Holland replied that “*everyone is using “Romex” with a pressure switch.*”

Mr. Cushing said that he did not agree, stating that Romex cable hanging down below the pressure sensing pipe was not allowed by the National Electrical Code (“NEC”).

Mr. Covell commented that the only violation appears to be the electrical connection. If the Board agrees that the pump rate and fees are justified, then the only outstanding issue would seem to be bringing the electrical connection into compliance. He asked the Board members for their comments.

Mr. Schofield stated for the Board that a homeowner may refuse to pay to have their wiring upgraded to current code. In cases like this, the licensed pump installer should write on the customers receipt “*customer did not want to pay for upgrade*” , or in some way provide written documentation showing that the homeowner was informed that the existing wiring does not meet current code. Mr. Schofield said that in his opinion it was between Mr. Guertin and Mr. Holland to decide how the issue would be resolved.

Mr. Pelletier joined the meeting at 10:10 am.

Mr. Covell asked the Board if they agreed that the charges for the pump and related work were justified. The Board members indicated that they agreed that the charges were justified. Mr. Holland was excused from the table.

Mr. Garside commented that the issues in this case appear to be the result of a communication problem.

Mr. Pelletier recommended that Mr. Holland notify Mr. Guertin in writing that the existing wiring needs to be brought up to code by a licensed electrician.

Chairman Cushing summarized the discussion by stating that the Board did not find that the charges (fees) in this case were inappropriate, and that there was no violation of ethics. Some of the Board members had expressed concerns regarding the circuit breaker that was replaced by Mr. Guertin. The Board requested that in addition to bringing the wiring up to code, Mr. Holland also verify that the circuit breaker was sized correctly.

Chairman Cushing asked the parties if they would be willing to going out in the hallway in an effort to reach an agreement. The parties went out to the hallway and returned within a few minutes. Mr. Guertin told the Board that "*Mr. Holland was going to take their advice*". Chairman Cushing requested that Mr. Holland give Mr. Schofield a phone call once the upgrading of the wiring has been completed. Mr. Holland indicated that he would do that. Chairman Cushing and the Board members thanked the parties for reaching an equitable solution.

Chairman Cushing told the Board that the matter would remain open until the next meeting. Once Mr. Schofield receives notification that the corrective measures have been completed and both parties are satisfied, the matter can be "set aside".

Licensing

New Applicants

The first application for consideration was requested by David Thomas for a Technical Drillers License. Mr. Thomas included a letter with his application which provides some background as to why he is applying for the license.

Chairman Cushing informed the Board that Mr. Thomas was present at the meeting. He read the letter from Mr. Thomas which explains that he owns his own business, Thomas Drilling and Blasting Corporation, and has been in the business since 1973. In recent years, his company has been installing DX geothermal loop systems. He states: "*The purpose for wanting a technical license is to be able to meet any future requirements for geothermal loop drilling.*"

Mr. Schofield informed the Board that Mr. Thomas had been invited to come to DES to talk about DX systems on September 2, 2008. He said that he and Mr. Pelletier asked Mr. Thomas to speak on this issue because they wanted to be more knowledgeable regarding these types of systems. Mr. Thomas brought Mel Hensch with him, Sales Representative for DCR Technologies, located in Lakeland, Florida. Several other DES staff members also attended the meeting. Mr. Schofield said that the presentation was very informative.

Mr. Schofield told the Board that after learning more about these types of systems, he and DES strongly feel that we should be requiring these contractors to be licensed. He said that he hoped that the Board would agree. He felt that a Technical Drillers License would be the “best fit”.

Mr. Pelletier talked more on this issue, explaining that even though the new rules have included regulations for geothermal systems, there is a grey area with regard to how geothermal contractors should be licensed. Working within the existing licenses offered, both he and Mr. Schofield felt that the Technical Drillers License was the most applicable to the nature of the work conducted by geothermal contractors. He went on to say that as the Board moves forward, he feels that we need to consider having an independent license for this purpose.

Mr. Schofield informed the Board that they are authorized by law to develop a specific or specialty license.

Chairman Cushing asked if we allow blasting contractors who do environmental exploratory drilling to obtain a license as a technical driller, are we throwing the “experience” requirement out the window?

Mr. Schofield clarified by saying it was his intention that Mr. Thomas be licensed as a Technical Driller specifically for geothermal loop drilling only.

The Board deferred to Mr. Garside for his opinion on the matter, since he represents the technical drillers. He said that “technically” he agreed that the Technical Drillers License was a good fit, and would apply to either bedrock or overburden situations. However, like water well drilling, the work involves a specific operation to produce a specific product; unlike technical drilling which includes a wide variety of different operations and functions. He went on to say that he agreed that a Technical Drillers License was probably the best fit at this point in time, but we should develop a specific geothermal loop license in the future.

Mr. Schofield reminded the Board that if they decide to develop a license specifically for geothermal loop drillers, it would require a rule-making process. The authority to create types of licenses is granted by statute under RSA 482-B:4.

Mr. Garside asked if other contractors are installing geothermal systems under a water well license, are we going to open a can of worms? Would this mean that all of these

contractors now have to obtain a Technical Drillers License in order to continue installing these systems?

Mr. Schofield said that there is flexibility in the rules to allow for a couple of “specialty” licenses to be issued under an exemption, but for this to continue on a regular basis would require rule-making.

Chairman Cushing asked Mr. Thomas if he would be agreeable to sit for the Technical Drillers License exam; he explained that the license would carry with it a restriction for small diameter, geothermal installation only. Mr. Thomas replied that he agreed with the Board’s thinking on this matter.

Mr. Garside said he did not agree with having Mr. Thomas take the Technical Drillers test because of the issue that had been raised earlier, specifically that the majority of contractors installing geothermal systems are licensed as water well contractors. He suggested that Mr. Thomas sit for a Water Well Contractors exam and be issued a license that would be limited to geothermal system installations.

Discussion continued amongst the Board members with regard to which exam would be the most appropriate for Mr. Thomas, including whether he should take a Rotary Drill Exam.

Chairman Cushing asked the Board if everyone agreed that Mr. Thomas should be issued a Water Well Drillers license limited to small diameter, DX geothermal systems only.

Mr. Garside asked whether Mr. Thomas would have to sit again for the exam once a specific license is developed for this purpose, or would he be grandfathered?

Chairman Cushing replied that he thought he would be grandfathered.

Mr. Garside asked if the grandfathering would pertain to all licensed Water Well Contractors.

Chairman Cushing responded yes, that he felt all existing licensed Water Well Contractors would be grandfathered.

Chairman Cushing asked the Board to vote on whether to allow David Thomas to sit for a Water Well Drillers exam, once issued the license would be a limited license for small diameter, closed-loop geothermal systems (4” diameter or less).

The Board voted unanimously to allow Mr. Thomas to sit for the exam.

The next applicant for consideration was Michael Bertholet for a Pump Installers License.

Following a brief discussion of Mr. Bertholet's references and work history, the Board voted unanimously to allow Mr. Bertholet to sit for the Pump Installers Exam.

Break at 11:05 am.

Meeting reconvened at 11:14 am.

Renewals

Mr. Schofield presented to the Board a summary of information regarding the number of new licenses issued, license renewals, and enforcement actions administered annually. Mr. Schofield reported that on average, 20 new licenses are issued annually. A total of approximately 238 Water Well Contractor licenses of different categories, and a total of 427 Pump Installer Licenses are renewed annually. He went on to say that within the last five years, the Water Well Board has handled an average of (4) complaints per year, (1) Appeal, and an average of (1) license action per year.

Mr. Schofield also provided the Board members with a copy of the most recent "Water Well News" which was sent out with the renewal letters. The newsletter addresses the most significant changes contained in the new rules.

Chairman Cushing asked Mr. Schofield about his data on the number of new well installations so far for this year. Mr. Schofield said the numbers were down; he had approximately 800 new well reports for the first half of this year. Mr. Schofield felt the numbers were a reflection of the economy. Mr. Pelletier added that the number of plans for septic systems received by the Subsurface Bureau was down by 40%.

New Business

Geothermal Wells – DX Systems

The Board members involved in considerable discussion regarding whether all geothermal installations were being reported. Mr. Schofield stated that all licensed Well Water Contractors are required to file a report for any new well. The point was made that systems involving smaller diameter pipe, such as DX systems, are being installed by contractors without a license. Mr. Schofield commented: "*unlicensed water well contractors do not file well reports*".

Mr. Covell stated that he feels the Board should seek a legal opinion on this matter from the Attorney Generals Office.

Mr. Pelletier said he will make an inquiry to the AG's office on the matter.

Mr. Schofield provided the Board members with a letter from the US Environmental Protection Agency, Atmospheric Pollution Prevention Division regarding Direct Exchange (DX) geothermal heat pumps (GHP's).

Chairman Cushing said we should have Material Safety Data Sheets ("MSDS) on these products.

Mr. Schofield stated that he felt information regarding the refrigerant should be listed on the copper tubing. He also told the Board that DES has been discussing the need for cathodic protection on these systems.

Mr. Pelletier said that we need to consider the development of additional rules to address the safety of the refrigerants used.

Mr. Covell mentioned that the industry is going to be developing new refrigerants.

Chairman Cushing commented that there are also lubricants used that we should be concerned about.

The Board members agreed that Mr. Schofield should obtain more information relative to this issue so it can be discussed further at the next meeting.

Request for Exemption of We 603.03

Mr. Schofield directed the Board's attention to a letter sent by Mr. Robert J. Silva. Mr. Silva recently had to have the well pump replaced at his property at 742 Weirs Boulevard, Laconia, NH. The well head of his system does not meet current standards as the well head is located within the dwelling in the middle of a walkway and below ground level. He is requesting an exemption from We 603.03 which requires that existing well heads below grade be raised to meet current standards. He states that extending the well head would be neither practical or cost efficient.

Chairman Cushing expressed concerns with granting an exemption because it could be mistaken for "a seal of approval". He told the Board about a situation involving a below grade well head located in a basement of a house that had a fire. The well became contaminated as a result of the fire and water needed to extinguish the fire.

Mr. Pelletier explained to the Board that DES told the property owner he can use the well, but requested that he take pictures of the well head before and after the pump replacement. To date, DES has not received any pictures. Mr. Pelletier recommended that we respond to Mr. Silva's letter by stating that we cannot act upon his request until we receive photographs of his well head.

The Board agreed with Mr. Pelletier's recommended course of action.

Interpretation of We 602.08 (g)(5)

Mr. Schofield told the Board that he had received a call from a water well contractor who had read this rule, and was installing a screened gravel well. He wanted to know how far

down from the ground surface the grout was required to go. His concern was that he did not want bentonite to get into the screen. Mr. Schofield told the contractor that he would bring his question up at the next Water Well Board Meeting, since the rule did not specify a distance.

Mr. Tasker said he would typically go down approximately 25' with bentonite chips.

Chairman Cushing said that it depends on the situation, but that the grouting should stop at the bottom of the confining layer.

Mr. Covell agreed with Chairman Cushing saying that there is no one correct answer, it is "site specific".

Unlicensed Contractors

Chairman Cushing directed the Board's attention to a Public Notice prepared by Mr. Schofield, intended to notify the public that water well contractors are required to be licensed.

Mr. Schofield told the Board that the Public Notice was in response to reports of several individuals installing wells and pumps without a license in the Ossipee area and throughout Coos County. He said that Jim Martin of our Public Information Office has the ability to e-mail the Notice to newspapers all over the state.

The Board agreed that publishing the notice in local newspapers was a good idea. The only comment was that Mr. Schofield may want to direct people to the Water Well Board webpage rather than listing his phone number.

Annual NGWA Water Well Construction Inventory

Mr. Schofield provided statistics from the National Groundwater Association ("NGWA") showing the number of wells installed in each state from 1980 to 2007. New Hampshire began reporting in 1984. A steady decline in the number of wells installed in NH from 2004 to 2007 can clearly be seen. Mr. Schofield reported that the figures for 2008 will be considerably lower than 2007, based upon the figures so far for half of the year. The total number of all new wells for 2007 was 3,265. The half year figure for 2008 was 800. Results for other states reflect the same trend.

Other

Wragg Brothers Letter

Mr. Schofield reported on a letter he had received from Ryan Wragg and Steve Meeker. Both of the men had passed the well drillers exam and wanted to know why they were required to work under their father's license numbers rather than being issued their own

license numbers. Mr. Mackey replied by sending them a letter explaining that in NH, the Water Well Board licenses are issued to the business or company.

Mr. Schofield told the Board that he believes individuals should be able to have their own license. However he added, it would need to be made clear that well reports must be issued under the “company” license.

Following some discussion on the matter, the Board agreed that individuals should be able to obtain their own license number.

Plastic Well Covers

Mr. Schofield provided photographs of a damaged plastic well cover that he received from Wade Pelham of the public drinking water program. The photos were taken during an inspection and illustrated Mr. Pelham’s contention that plastic covers should not be allowed.

The Board members agreed that plastic caps are not reliable and do not hold up over time.

Mr. Pelletier suggested that we address this issue with rules when we work on additional rules for geothermal wells.

Geothermal Well Questions

Mr. Schofield told the Board he had been asked a question by Bill Conaway with Skillings & Sons regarding geothermal wells. He wanted to know if a geothermal well could be installed in a nonconforming location.

Following a short discussion, the Board agreed that the criteria for a geothermal well would be the same as any other well; it can be located in a nonconforming location as long as there is no alternative.

He also wanted to know why open loop wells are required to be grouted with a cement-bentonite grout, rather than just bentonite or just cement.

The Board told Mr. Schofield that the reason for combining the bentonite with the concrete is that it prevents the concrete from shrinking and cracking. The concern with using bentonite alone is that it can wash away over time.

Mr. Conaway also asked why 20 feet of casing is required into bedrock for geothermal wells while drinking water wells only require 10 feet of casing into bedrock.

The Board replied that it is because open loop systems are under extreme stresses.

Bemis Case

Mr. Schofield directed the Board's attention to a news release from the AG's office relative to the Jeffrey Bemis case. Mr. Bemis plead guilty on July 24, 2008. The news release also includes the specifics of his penalty.

The meeting was adjourned at 12:20 pm.